CLAIMS

1. A method of overlaying a second CDMA system over a first CDMA system comprising the steps of:

transmitting a first signal using a first CDMA channelization;

transmitting a second signal using a second CDMA channelization, wherein said first and second CDMA channelization share at least a portion of a common frequency spectrum and wherein said first signal and said second signal are transmitted into a common coverage area;

obtaining signal energy corresponding to said first signal;

obtaining signal energy corresponding to said second signal;

comparing a phase of said first signal to a phase of said second signal to generate a phase error indication based upon said obtained signal energies; and

adjusting a phase at which said second signal is transmitted in response to said phase error indication.

2. The method of Claim 1, wherein said first signal is a pilot signal.

3. The method of Claim 1, wherein steps of transmitting said first and second signals comprise the step of transmitting said first and second signals over a first antenna.

4. The method of Claim 3, wherein steps of obtaining signal energy corresponding to said first and second signals comprise the step of receiving said first and second signals over a second antenna.

5. The method of Claim 1, wherein step of obtaining signal energy corresponding to said second signal comprises the step of using a coupler.

6. The method of Claim 1, wherein said second CDMA channelization has a wider spectrum than said first CDMA channelization.

7. The method of Claim 1, wherein said first CDMA channelization has a wider spectrum than said second CDMA channelization.

8. The method of Claim 1, wherein said second signal is a remote unit specific signal.

9. The method of Claim 1, wherein said second signal is an information signal.

10. The method of Claim 1, wherein said second signal is a broadcast signal.

11. A method of overlaying a second CDMA system over a first CDMA system comprising the steps of:

transmitting a first signal using a first CDMA channelization;

transmitting a second signal using a second CDMA channelization, wherein said first and second CDMA channelization share at least a portion of a common frequency spectrum and wherein said first signal and said second signal are transmitted into a common coverage area;

obtaining signal energy corresponding to said first signal;

obtaining signal energy corresponding to said second signal;

comparing a timing of said first signal to a timing of said second signal to generate a timing error indication based upon said obtained signal energies; and

adjusting a timing at which said second signal is transmitted in response to said timing error indication.

12. The method of Claim 11, wherein said first signal is a pilot signal.

13. The method of Claim 11, wherein steps of transmitting said first and second signals comprise the step of transmitting said first and second signals over a first antenna.

14. The method of Claim 13 wherein steps of obtaining signal energy corresponding to said first and second signals comprise the step of receiving said first and second signals over a second antenna.

15. The method of Claim 11, wherein step of obtaining signal energy corresponding to said second signal comprises the step of using a coupler.

16. The method of Claim 11 wherein said second CDMA channelization has a wider spectrum than said first CDMA channelization.

17. The method of Claim 11 wherein said first CDMA channelization has a wider spectrum than said second CDMA channelization.

18. The method of Claim 11 wherein said second signal is a remote unit specific signal.

19. The method of Claim 11 wherein said second signal is an information signal.

20. The method of Claim 11, wherein said second signal is a broadcast signal.

21. A method of overlaying a second CDMA system over a first CDMA system comprising the steps of:

receiving a first signal and one or more first information signals, said first information signals using a first CDMA channelization and providing service to a first coverage area;

receiving one or more second information signals, said second information signals using a second CDMA channelization and providing service to at least a portion of said first coverage area;

determining a power level of said first signal;

determining a power level of each of said one or more first information signals;

determining a power level of each of said one or more second information signals; and

determining a level of loading within said at least said portion of said first coverage area based upon said power level of said first signal and said power levels of said one or more first and second information signals.

22. The method of Claim 21, further comprising the step of transmitting said one or more first information signal and said one or more second information over a first antenna.

23. The method of Claim 22, wherein steps of receiving comprise the step of receiving signal energy over a second antenna.

24. The method of Claim 21 wherein steps of receiving comprise the step of using a coupler.

25. The method of Claim 21 further comprising using said level of loading to determine an admission criteria for admission of information signals transmitted using said second CDMA channelization.

26. The method of Claim 21 wherein said second CDMA channelization has a wider spectrum than said first CDMA channelization.

27. The method of Claim 21, wherein said first CDMA channelization has a wider spectrum than said second CDMA channelization.

28. The method of Claim 21 wherein said first signal is a pilot signal.

29. A CDMA system comprising:

a first base station configured to transmit a first signal;

a second base station configured to transmit a second signal; and

a sync unit configured to receive said first signal and said second signal and configured to determine a relative phase difference therebetween;

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wherein said second base station is further configured to adjust a phase at which said second signal is transmitted based upon said relative phase difference.

30. The CDMA system of Claim 29, further comprising a first antenna coupled to said first and second base stations and configured to emit said first signal and said second signal.

31. The CDMA system of Claim 29 wherein said first signal is a pilot signal and said second signal is an information signal.

32. The CDMA system of Claim 29 wherein said first signal is transmitted using a first CDMA channelization and said second signal is transmitted using a second CDMA channelization.

33. A CDMA system comprising:

a first base station configured to transmit a first signal;

a second base station configured to transmit a second signal; and

a sync unit configured to receive said first signal and said second signal and configured to determine a relative timing difference therebetween;

wherein said second base station is further configured to adjust a timing at which said second signal is transmitted based upon said relative timing difference.

34. A CDMA system comprising:

a first base station configured to transmit a first signal and one or more first information signals, said first information signals providing service to a first coverage area;

a second base station configured to transmit one or more second information signals having a second CDMA channelization, said second information signals providing service to at least a portion of said first coverage area; and

a sync unit configured to obtain a power level corresponding to each of said first signal and said one or more first and second information signals;

wherein said second sync unit is further configured determine a level of loading within said at least said portion of said first coverage area based upon said power measurement of said first signal and said power measurements of said one or more first and second information signals.

35. The CDMA system of Claim 34, wherein said second base station is further configured to determine an admission criteria for admission of information signals transmitted using said second CDMA channelization.

36. A sync unit comprising:

a first receiver configured to receive a first signal having a first CDMA channelization and to produce an indication of a timing of said first signal;

a second receiver configured to receive a second signal having a second CDMA channelization and to produce an indication of a timing of said second signal; and

a time error detection unit configured to compare said timing of said first signal and said timing of said second signal to determine a relative timing offset indication to be used to adjust a transmission timing of said second signal.

37. The sync unit of Claim 36 wherein said sync unit further comprises an antenna through which said first and second signal are received.

38. The sync unit of Claim 36 wherein said sync unit further comprises a coupler through which said first and second signal are received.

39. The sync unit of Claim 36, wherein said first and second receivers share at least a portion of hardware.

40. The sync unit of Claim 36 wherein said first and second receivers are a single time-shared unit.

41. The sync unit of Claim 36, further comprising a phase error detection unit configured to compare a phase of said first signal and a phase of said second signal to determine a relative phase offset indication to be used to adjust a transmission phase of said second signal.

42. The sync unit of Claim 36 further comprising a power measurement unit configured to determine a power level of said first and second signal and a compare unit configured to determine a level of loading within a coverage area corresponding to said first and second signals.

43. A sync unit comprising:

a first receiver configured to receive a first signal and one or more first information signals having a first CDMA channelization, said first information signals providing service to a first coverage area;

a second receiver configured to receive one or more second information signals having a second CDMA channelization, said second information signals providing service to at least a portion of said first coverage area;

a power measurement unit configured to determine a power level of said first signal, a power level of each of said one or more first information signals, and a power level of each of said one or more second information signals; and

a compare unit configured to determine a level of loading within said at least said portion of said first coverage area based upon said power level of said first signal and said power level of said one or more first and second information signals.